SEARCH REQUEST FORM (STIC)

Requestor's Name: David Lukton

Examiner number: 71263

Date: 10/6/06

Art Unit: 1654

Phone number: 571-272-0952

Serial Number:

09-854816

Mail Box: 3-C-18

Examiner Rm: 3-D-19

Results format: paper

Title: CONSTRAINED HELICAL PEPTIDES AND METHODS OF MAKING SAME

Applicants: BRAISTED, ANDREW C.; JUDICE, J. KEVIN; MCDOWELL, ROBERT S.; PHELAN, J. CHRISTOPHER; STAROVASNIK, MELISSA A.; WELLS, JAMES A.;

Earliest Priority Date: 11/6/96

Applicants are claiming cyclic peptides as shown on the attached sheet.

 R^1 = anything;

 R^2 = anything;

 R^3 = anything;

n = an integer of 3 - 4

p = an integer of 3 - 4

m = an integer of 1 - 6

q = an integer of 6 (no more and no less)

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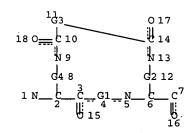
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NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

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SEARCH TIME: 00.00.01

1 ANSWERS

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FILE COVERS 1907 - 10 Oct 2006 VOL 145 ISS 16 FILE LAST UPDATED: 8 Oct 2006 (20061008/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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- L14 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2002:251292 HCAPLUS Full-text
- DN 137:211058
- TI Exploration of the DTrp-NMeLys Motif in the Search for potent somatostatin antagonists
- AU Rajeswaran, W. G.; Murphy, William A.; Taylor, John E.; Coy, David H.
- CS Department of Medicine, SL 53, Peptide Research Labs, Tulane University Health Sciences Center, New Orleans, LA, 70112, USA
- SO Bioorganic & Medicinal Chemistry (2002), 10(6), 2023-2029 CODEN: BMECEP; ISSN: 0968-0896
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- AB Previous studies from this laboratory demonstrated that N-methylation at Lys5 residue in somatostatin octapeptide antagonist analogs increased the GH release inhibition potency by as much as 300%. The authors have now further investigated N-methylation of this Lys5 residue in conjunction with a number of N- and C-terminal modifications previously found to give highly potent somatostatin receptor antagonists. Synthetic analogs were tested in a functional assay for their ability to inhibit somatostatininhibited GH release from rat pituitary cells in culture and to displace 125I-labeled somatostatin from CHO cells transfected with the five known human somatostatin receptors. Several interesting observations resulted from the study. Replacement of lipophilic Nal8 at the C-terminus with a hydrophilic His8 resulted in the increased affinity and selectivity for type 2 receptor to give the most potent antagonist analog yet discovered (Ki, 1.5 nM), although in the rat pituitary cells inhibitory activity on somatostatin inhibited GH release decreased somewhat. A His3 substitution within the cyclic portion of the analogs retained pituitary cell potency and affinity for type 2 receptor as did substitution with Bip8 and Fpal. Replacement of Cpal with Iph1 did not effect the affinity for type 2 receptor significantly, but did decrease the effects on rat cell GH release. Iph3 within-ring substitution increased the selectivity for sst2 appreciably although the affinity for that receptor was considerably decreased. Substitution of Npa3 resulted in good selectivity for sst2 receptor. Replacement of Nal8 with D-Trp8 also increased the selectivity for type 2 receptor. Use of a 'bivalent ligand' approach in which two peptides were joined by 4,4'-biphenyldicarbonyl as a spacer destroyed the affinity for all the subtypes, however, the bivalent ligand formed with the Ahp spacer displayed significant affinity and high selectivity for the type 2 receptor.
- IT 455333-34-3P
 - RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (exploration of DTrp-NMeLys motif in search for potent human somatostatin receptor antagonists)
- RN 455333-34-3 HCAPLUS
- CN L-Alaninamide, 3-[(3-carboxy-1-oxopropyl)amino]-L-alanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-N2-methyl-L-lysyl-L-threonyl-L-cysteinyl-3-amino-,

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C

RETABLE

Year	VOL	PG	Referenced Work	Referenced
(RPY)	(RVL)	(RPG)	(RWK)	File
+=====	+=====	+=====	+======================================	+========
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1997	51	170	Mol Pharmacol	HCAPLUS
1982	31	1133	Life Sci	HCAPLUS
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- AN 2001:573536 HCAPLUS Full-text
- DN 135:122757
- Preparation of constrained helical peptides ΤI
- IN Braisted, Andrew C.; Judice, J. Kevin; Mcdowell, Robert S.; Phelan, J. Christopher; Starovasnik, Melissa A.; Wells, James A.
- Genentech, Inc., USA PΑ
- U.S., 175 pp., Cont.-in-part of U.S. Ser. No. 876,698, abandoned. CODEN: USXXAM so
- \mathtt{DT} Patent
- LA English

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AB Cyclic peptides, e.g., [NHCO(CH2)mCH(NHX)CO-Z-NHCH(COYS)(CH2)pCONH](CH2)n [(CH2)n is attached to NH end groups, S is absent or is a macromol., X is H or is any amino acid or amino acid sequence, Y is absent or is hydroxyl if S is absent or is any amino acid or amino acid sequence, Z is any amino acid sequence consisting of six amino acids, m and p are 0-6, n is an integer greater than zero], with constrained region(s) having an α-helical conformation, were prepared Constrained helical peptides having amino acid sequences from HIV gp41 are provided, as is their use in preparing antibodies that prevent viral membrane fusion. Thus, cyclic peptide FNM(5)QQRRFY(6)ALH (5 and 6 represent glutamic acid residues cyclized via 1,5-pentanediamine) was prepared by standard solid phase protocols.

IT 137363-78-1P 185335-95-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation of constrained helical peptides)

RN 137363-78-1 HCAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- α -glutamyl-6-mercapto-D-norleucyl-L-alanyl-L-alanyl-L-lysyl-L-phenylalanyl-L-leucyl-6-mercapto-L-norleucyl-L-alanyl-L-histidyl-, cyclic (3 \rightarrow 10)-disulfide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B

PAGE 2-C

RN 185335-95-9 HCAPLUS

L-Glutamamide, N-acetyl-L-threonyl-L-asparaginyl-6-mercapto-D-norleucyl-L- α -aspartyl-L-leucyl-L-alanyl-L-alanyl-L-arginyl-L-arginyl-6-mercapto-L-norleucyl-L-glutaminyl-, cyclic (3 \rightarrow 10)-disulfide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

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1999WO-US21547	Α	19990915
1999CA-2344465	A 3	19991005
2000AU-0017482	A 3	19991130
1999WO-US28313	Α	19991130
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	A	
1999WO-US30095	Δ	19991216
1999US-0099309	Λ	
177703-0077307		19991220
	A	19991220
1999WO-US30911		19991220 19991220
	A	

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2000WO-US04341	, A	20000218
2000US-0441400	Α	20000222
2000WO-US04414	Α	20000222
2000WO-US04914	Α	20000224
2000WO-US05004	Α	20000224
	•	
2000WO-US05841	A2	20000302
2000WO-US06471	W	20000309
2000WO-US06319	Α	20000310
2000WO-US06884	Α	20000315
	Α	20000320
2000WO-US07377		
2000WO-US08439	A1	20000330
2000US-198121P	P	20000418
2000US-198585P	P	20000418
2000US-199397P	P	20000425
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2000US-201516P	P	20000503
2000WO-US13358	Α	20000515
2000US-204675P	P	20000517
2000WO-US13705	Α	20000517
2000WO-US14042	Α	20000522
2000WO-US14941	Α	20000530
2000WO-US15264	Α	20000602
2000WO-US20710	A	20000728
2000WO-US22031	Α	20000811
2000US-227133P	P	20000822
		20000823
2000WO-US23522	Α	
2000CA-2380355	A 3	20000824
2000WO-US23328	Α	20000824
2000US-232887P	P	20000915
2000US-0690189	A3	20001016
2000WO-US30952	Α	20001108
2001US-0816920	B1	20010322
2001WO-US17443	W	20010530
2001EP-0939834	A3	20010601
2004EP-0005726	A 3	20010601
2001WO-US17800	A	
		20010601
2001US-0880457	Α	20010612
2001US-0882636	B1	20010614
2001WO-US19692		20010620
	A۰	
2001WO-US21066	Α	20010629
2001WO-US21735	Α	20010709
2001US-0927796	B1	20010809
2001WO-US26626	W	20010823
2001US-0941992	A1	20010828
2001US-0990711	A1	
		20011114
2001US-0002796	Α	20011115
2001US-0997573	A1	20011115
2001WO-US48938	W	20011213
2002US-0052586	A1	20020115
2002WO-US10513	· W	20020403
2002US-0123155	A1	20020415
2002US-0127825	A1	20020422
2002US-0127966	B1	20020423
2002US-0141703	A1	20020508
2002US-0145627	A1	20020514
2002US-0145751	Α	20020514
2002US-0146793	A1	20020515
2002US-0197703	B1	20020717
2002US-0197708	A1	20020717
2002US-0199666	A1	20020718
2002US-0199464	B1	20020719
2002US-0211858	A1	20020802
2003AU-0261484		
2003110 0204101	Α	20031106
2004US-0797366	A Al	20031106 20040309

AB Cyclic peptides, e.g., [NHCO(CH2)mCH(NHX)CO-Z-NHCH(COYS)(CH2)pCONH](CH2)n [(CH2)n is attached to NH end groups, S is absent or is a macromol., X is H or is any amino acid or amino acid sequence, Y is absent or is hydroxyl if S is absent or is any amino acid or amino acid sequence, Z is any amino acid sequence consisting of six amino acids, m and p are 0-6, n is an integer greater than zero], with constrained region(s) having an α-helical conformation, were prepared Constrained helical peptides having amino acid sequences from HIV gp41 are provided, as is their use in preparing antibodies that prevent viral membrane fusion. Thus, cyclic peptide FNM(5)QQRRFY(6)ALH (5 and 6 represent glutamic acid residues cyclized via 1,5-pentanediamine) was prepared by standard solid phase protocols.

IT 137363-78-1P 185335-95-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of constrained helical peptides)

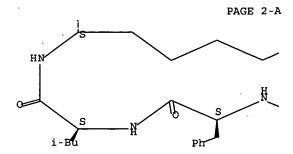
RN 137363-78-1 HCAPLUS

CN L-Alaninamide, N-acetyl-L-alanyl-L- α -glutamyl-6-mercapto-D-norleucyl-L-alanyl-L-alanyl-L-alanyl-L-phenylalanyl-L-leucyl-6-mercapto-L-norleucyl-L-alanyl-L-histidyl-, cyclic (3 \rightarrow 10)-disulfide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

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RN 185335-95-9 HCAPLUS

CN L-Glutamamide, N-acetyl-L-threonyl-L-asparaginyl-6-mercapto-D-norleucyl-L- $\alpha \text{-aspartyl-L-leucyl-L-alanyl-L-arginyl-L-arginyl-6-mercapto-L-norleucyl-L-glutaminyl-, cyclic (3 \rightarrow 10)-disulfide (9CI) (CA INDEX NAME)$

Absolute stereochemistry.

PAGE 1-B

RETABLE

Referenced Author (RAU)		VOL		Referenced Work	Referenced File
Genentech Inc	1991	 	l	WO9115512 A	HCAPLUS
Lawless. M	1996		1 13697	BIOCHEMISTRY	HCAPLUS
Lawress, M	TAAP	35	1369/	BIOCHEMISTRY	HCAPLUS
Phelan, J	1997	119	455	JOURNAL OF THE AMERI	HCAPLUS
Smithkline Beecham Corp	1992			WO9209625 A	HCAPLUS
Univ Pennsylvania	1995	ĺ		WO9534312 A	HCAPLUS
Zhang, X	1997	15	150	NATURE BIOTECHNOLOGY	HCAPLUS

L14 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:80130 HCAPLUS Full-text

DN 126:75230

TI A General Method for Constraining Short Peptides to an $\alpha\text{-Helical}$ Conformation

AU Phelan, J. Christopher; Skelton, Nicholas J.; Braisted, Andrew C.;

McDowell, Robert S.

- CS Department of Bioorganic Chemistry and Department of Protein Engineering, Genentech Inc., South San Francisco, CA, 94080, USA
- SO Journal of the American Chemical Society (1997), 119(3), 455-460 CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DT Journal
- LA English
- AB A method for constraining short peptides (containing fewer than 20 residues) of an arbitrary sequence to an α -helical conformation (.apprx.100% helical in H2O at 25 °C) is presented. Gln residues at positions i and i + 7 of the peptides were tethered with an alkanediyl chain between the side chain nitrogen atoms. Peptides containing this tether were readily synthesized on the solid phase by amide formation between an α , α -diaminoalkane and the side chain carboxylates of Glu residues. The resulting cyclic peptides were studied by NMR and CD and were found to adopt an α -helical conformation in aqueous solution and this α -helix was thermally stable to \geq 40°. Corresponding untethered control peptides with N-methylglutamine at the i and i + 7 positions lacked helicity under the same conditions.

IT 137363-78-1P 185335-95-9P

- RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of short peptides constrained to an α -helical conformation)
- RN 137363-78-1 HCAPLUS
- CN L-Alaninamide, N-acetyl-L-alanyl-L-α-glutamyl-6-mercapto-D-norleucyl-L-alanyl-L-alanyl-L-alanyl-L-lysyl-L-phenylalanyl-L-leucyl-6-mercapto-L-norleucyl-L-alanyl-L-histidyl-, cyclic (3→10)-disulfide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-C

 α -aspartyl-L-leucyl-L-alanyl-L-arginyl-L-arginyl-6-mercapto-L-norleucyl-L-glutaminyl-, cyclic (3 \rightarrow 10)-disulfide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

RETABLE Referenced Author (RAU)	Year	, ,	• •	Referenced Work	Referenced File
Albert, J		-====- 34	+=====· 984	J Am Chem Soc	HCAPLUS
•		34			
Bernstein, F	1977	112	535	J Mol Biol	HCAPLUS
Bierzynski, A	1982	79	2470	Proc Natl Acad Sci U	HCAPLUS
Blaney, J			j	DGEOM, QCPE No 590	
Bracken, C	1994	116	6431	J Am Chem Soc	HCAPLUS
Brazil, B	İ		İ	Submitted for public	
Brown, J	1971	10	470	Biochemistry	HCAPLUS

Callewaert, G	1968	1	111	FEBS Lett	HCAPLUS
Callewaert, G	1968	1	111	FEBS Lett	HCAPLUS
Chorev, M	1991	30	5968	Biochemistry	HCAPLUS
Danho, W	1995	j	ĺ	Fourteenth American	1
Fairman, R	1992	114	5458	J Am Chem Soc	HCAPLUS
Fezoui, Y	1994	91	3675	Proc Natl Acad Sci U	HCAPLUS
Finkelstein, A	1991	10	287	Proteins:Struct, Fun	MEDLINE
Forood, B	1993	90	838	Proc Natl Acad Sci U	HCAPLUS
Ghadiri, M	1990	112	1630	J Am Chem Soc	HCAPLUS
Ghadiri, M	1990	112	9633	J Am Chem Soc	HCAPLUS
Habermann, E	1965	343	192	Biochem Z	HCAPLUS
Habermann, E	1965	343	192	Biochem Z	HCAPLUS
Hahn, G	1939	72	1281	Berichte	ĺ
Harper, E	1993	30	7605	Biochemistry	Ì
Ho, S	1987	109	6751	J Am Chem Soc	HCAPLUS
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Houston, M	1995	1	274	J Pept Sci	HCAPLUS
Huyghues-Despointes, B	1992	31	1476	Biochemistry	HCAPLUS
Jackson, D	1991	113	9391	J Am Chem Soc	HCAPLUS
Kemp, D	1991	56	6672	J Org Chem	HCAPLUS
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Kemp, D	1990		249	TIBTech	HCAPLUS
Lieberman, M	1991		332	Pept:Chem Biol, Proc	
Lyu, P	1993	32	421	Biochemistry	HCAPLUS
Marqusee, S	1989	86	5286	Proc Natl Acad Sci U	HCAPLUS
Osapay, G	1990	112	6046	J Am Chem Soc	HCAPLUS
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Ravi, A	1983	105	105	J Am Chem Soc	HCAPLUS
Ruan, F	1990	112	9403	J Am Chem Soc	HCAPLUS
Schollkpf, U	1981	20	798	Angew Chem, Int Ed E	
Scholtz, J	1993	32	9668	Biochemistry	HCAPLUS
Shipolini, R	1967		679	Chem Commun	HCAPLUS
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Shoemaker, K	1987	326	563	Nature	HCAPLUS
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Todd, R	1991	10	156	Proteins:Struct, Fun	HCAPLUS
Wuthrich, K	1986			NMR of Proteins and	
Yu, C	1995		1	Fourteenth American	1
Zhou, H	1994	116	1139	J Am Chem Soc	HCAPLUS

- L14 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 1991:680537 HCAPLUS Full-text
- DN 115:280537
- TI General approach to the synthesis of short α -helical peptides
- AU Jackson, David Y.; King, David S.; Chmielewski, Jean; Singh, Sunil; Schultz, Peter G.
- CS Dep. Chem., Univ. California, Berkeley, CA, 94720, USA
- SO Journal of the American Chemical Society (1991), 113(24), 9391-2 CODEN: JACSAT; ISSN: 0002-7863
- DT Journal
- LA English
- OS CASREACT 115:280537
- AB Short peptides have been synthesized which contain a single intramol. disulfide bond that stabilizes two helical turns. Peptides containing D- and L-S-(acetamidomethyl)-2-amino-6-mercaptohexanoic acid at the i and i + 7 residue, resp., show only slight α -helicity in the reduced form in aqueous solution. On oxidation, these peptides exhibit a large increase in α -helicity in water both at 0° and 60°. This approach has been used to generate eight and sixteen amino acid peptides with high helicity. Oxidation can be carried out under a wide variety of conditions with peptides that contain a large variety of functional groups.
- IT 137363-78-1P
 - RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and conformation of)
- RN 137363-78-1 HCAPLUS
- CN L-Alaninamide, N-acetyl-L-alanyl-L- α -glutamyl-6-mercapto-D-norleucyl-L-alanyl-L-alanyl-L-lysyl-L-phenylalanyl-L-leucyl-6-mercapto-L-

norleucyl-L-alanyl-L-histidyl-, cyclic $(3\rightarrow 10)$ -disulfide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-C



=> b uspatall FILE 'USPATFULL' ENTERED AT 09:44:57 ON 10 OCT 2006 CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:44:57 ON 10 OCT 2006 CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs fhitstr hitrn 116 tot

L16 ANSWER 1 OF 2 USPATFULL on STN

AN 2003:244455 USPATFULL Full-text

TI Secreted and transmembrane polypeptides and nucleic acids encoding the same

IN Botstein, David, Belmont, CA, UNITED STATES
Desnoyers, Luc, San Francisco, CA, UNITED STATES
Ferrara, Napoleone, San Francisco, CA, UNITED STATES
Fong, Sherman, Alameda, CA, UNITED STATES
Gao, Wei-Qiang, Palo Alto, CA, UNITED STATES
Goddard, Audrey, San Francisco, CA, UNITED STATES
Gurney, Austin L., Belmont, CA, UNITED STATES
Pan, James, Belmont, CA, UNITED STATES
Roy, Margaret Ann, San Francisco, CA, UNITED STATES
Stewart, Timothy A., San Francisco, CA, UNITED STATES
Tumas, Daniel, Orinda, CA, UNITED STATES

Watanabe, Colin K., Moraga, CA, UNITED STATES Wood, William I., Hillsborough, CA, UNITED STATES

PA GENENTECH, INC. (U.S. corporation)

PI US2003170864 A1 20030911

AI 2001US-0866034 A1 20010525 (9)

RLI Continuation of Ser. No. 2000WO-US14941, filed on 30 May 2000, UNKNOWN Continuation of Ser. No. 2000WO-US15264, filed on 2 Jun 2000, UNKNOWN Continuation of Ser. No. 2000WO-US32678, filed on 1 Dec 2000, UNKNOWN

DT Utility

FS APPLICATION

LREP KNOBBE, MARTENS, OLSON AND BEAR, LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN 18 Drawing Page(s)

LN.CNT 7716

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention is directed to novel polypeptides and to nucleic acid molecules encoding those polypeptides. Also provided herein are vectors and host cells comprising those nucleic acid sequences, chimeric polypeptide molecules comprising the polypeptides of the present invention fused to heterologous polypeptide sequences, antibodies which bind to the polypeptides of the present invention and to methods for producing the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 185335-87-9P

(preparation of constrained helical peptides)

RN 185335-87-9 USPATFULL

CN L-Glutamamide, N-acetyl-L-threonyl-L-asparaginyl-N-(3-aminopropyl)-L-glutaminyl-L- α -aspartyl-L-leucyl-L-alanyl-L-alanyl-L-arginyl-L-arginyl-L-arginyl-L-glutaminyl-, (10 \rightarrow 3)-lactam (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

IT 185335-87-9P 185335-88-0P 185335-89-1P 185335-91-5P 185335-92-6P 185335-93-7P 207676-47-9P

(preparation of constrained helical peptides)

L16 ANSWER 2 OF 2 USPATFULL on STN AN 2001:125963 USPATFULL Full-text Constrained helical peptides and methods of making same ΤI Braisted, Andrew C., San Francisco, CA, United States TN Judice, J. Kevin, San Francisco, CA, United States McDowell, Robert S., San Francisco, CA, United States Phelan, J. Christopher, San Francisco, CA, United States . Starovasnik, Melissa A., Burlingame, CA, United States Wells, James A., Burlingame, CA, United States Genentech, Inc., South San Francisco, CA, United States (U.S. PA corporation) 20010807 PΙ US---6271198 1997US-0965056 19971105 (8) ΑI Continuation-in-part of Ser. No. 1997US-0876698, filed on 16 Jun 1997, RLI now abandoned, said Ser. No. US 965056 And Ser. No. 1996US-0743698, filed on 6 Nov 1996 PRAI ' 1997US-049787P 19970616 (60) DT Utility FS GRANTED Primary Examiner: Jones, Dwayne C.; Assistant Examiner: EXNAM Delacroix-Muirheid, C. Piper Marbury Rudnick & Wolfe LLP, Kelber, Steven B. LREP Number of Claims: 4 CLMN ECL Exemplary Claim: 1 40 Drawing Figure(s); 34 Drawing Page(s) DRWN LN.CNT 6260

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Provided are cyclized peptides with a constrained region(s) having an α -helical conformation. Constrained helical peptides having amino acid sequences from HIV gp41 are provided, as is their use in preparing antibodies that prevent viral membrane fusion. Also provided are methods for making such cyclized peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 185335-87-9P

(preparation of constrained helical peptides)

185335-87-9 USPATFULL RN

L-Glutamamide, N-acetyl-L-threonyl-L-asparaginyl-N-(3-aminopropyl)-L-CN glutaminyl-L-α-aspartyl-L-leucyl-L-alanyl-L-alanyl-L-arginyl-Larginyl-L- α -glutamyl-L-glutaminyl-, (10 \rightarrow 3)-lactam (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

IT 185335-87-9P 185335-88-0P 185335-89-1P 185335-91-5P 185335-92-6P 185335-93-7P 207676-47-9P

(preparation of constrained helical peptides)

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L3 1856 SEA L2

L4 STR

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L14 5 L12-13

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L16 2 L6,L10

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